

INTERNATIONAL SEARCH REPORT

Int. onal Application No

PCT/IB2004/001013

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01R4/68 H01L39/24

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H01L H01R H01B H01F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PATENT ABSTRACTS OF JAPAN vol. 017, no. 342 (C-1076), 29 June 1993 (1993-06-29) -& JP 05 043341 A (SUMITOMO HEAVY IND LTD), 23 February 1993 (1993-02-23) abstract paragraphs '0006! - '0010!; figure 4	1
A	PATENT ABSTRACTS OF JAPAN vol. 018, no. 477 (E-1602), 6 September 1994 (1994-09-06) -& JP 06 163255 A (MITSUI MINING & SMELTING CO LTD), 10 June 1994 (1994-06-10) abstract -/-	1

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

4 February 2005

Date of mailing of the international search report

22/02/2005

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PATENT ABSTRACTS OF JAPAN vol. 018, no. 442 (E-1593), 17 August 1994 (1994-08-17) -& JP 06 140234 A (SUMITOMO HEAVY IND LTD), 20 May 1994 (1994-05-20) abstract	1
A	PATENT ABSTRACTS OF JAPAN vol. 018, no. 266 (E-1551), 20 May 1994 (1994-05-20) -& JP 06 045141 A (SUMITOMO HEAVY IND LTD), 18 February 1994 (1994-02-18) abstract	1
A	PATENT ABSTRACTS OF JAPAN vol. 017, no. 035 (E-1310), 22 January 1993 (1993-01-22) -& JP 04 255203 A (MITSUI MINING & SMELTING CO LTD), 10 September 1992 (1992-09-10) abstract	1
A	US 6 216 333 B1 (KOJIMA MASAHIRO ET AL) 17 April 2001 (2001-04-17) column 6, line 41 - column 7, line 27	1
A	US 5 480 728 A (TKACZYK ET AL) 2 January 1996 (1996-01-02) column 2, line 27 - column 4, line 31	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB2004/001013

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 05043341	A	23-02-1993	NONE	
JP 06163255	A	10-06-1994	NONE	
JP 06140234	A	20-05-1994	JP 3032653 B2 DE 69324436 D1 DE 69324436 T2 DE 69333128 D1 DE 69333128 T2 EP 0596249 A2 EP 0837478 A1 US 5623240 A	17-04-2000 20-05-1999 26-08-1999 04-09-2003 22-04-2004 11-05-1994 22-04-1998 22-04-1997
JP 06045141	A	18-02-1994	NONE	
JP 04255203	A	10-09-1992	JP 7079045 B	23-08-1995
US 6216333	B1	17-04-2001	JP 3548368 B2 JP 10027708 A	28-07-2004 27-01-1998
US 5480728	A	02-01-1996	NONE	